To: Neville Kingham[neville@kinghamcsi.com]

From: Powell, Greg

Sent: Thur 8/13/2015 2:07:23 AM

Subject: FW: Test Flush-Consolidated Animas Ditch West Side- Gold King Mine Release

See what I am dealing with!!!!!!!

From: Foster, Althea

Sent: Wednesday, August 12, 2015 9:23 PM

To: Myers, Craig; Powell, Greg

Cc: Nattis, Randy; Hayes, Mark; Crossland, Ronnie; Webster, Susan; Petersen, Chris; Rauscher,

Jon; Rinehart, Jon

Subject: RE: Test Flush-Consolidated Animas Ditch West Side- Gold King Mine Release

Craig, Greg;

We've asked to clarify some elements of your flush. Were you using water from the Animas to flush the ditches? Where was the flush water going? Were you conducting the flushes because the ditches were already impacted?

Any additional information would be appreciated.

From: Myers, Craig

Sent: Wednesday, August 12, 2015 7:19 PM **To:** Foster, Althea; Nattis, Randy; Hayes, Mark

Subject: Fwd: Test Flush-Consolidated Animas Ditch West Side- Gold King Mine Release

Greg Powell's observations and thoughts on the irrigation flush test we did today. Please call me with questions.

Craig

303.808.1738

Sent from my iPhone

Begin forwarded message:

From: "Powell, Greg" < Powell. Greg@epa.gov > Date: August 12, 2015 at 2:57:58 PM MDT

To: "Myers, Craig" < Myers.Craig@epa.gov >, "Dhieux, Joyel" < Dhieux.Joyel@epa.gov >

Cc: "Wall, Dan" < wall.dan@epa.gov>

Subject: Test Flush-Consolidated Animas Ditch West Side- Gold King Mine Release

Greetings:

At approximately 12:15 on August 12, 2015 a test flush of sediments at the head end of the western Consolidated Animas Irrigation canal was conducted. The purpose of the test was to visually evaluate sediment transport conditions that would occur upon partially opening the control gate. Ferrous sediments were observed to have been deposited bank to bank in the channel as a result of the mine release.

The control gate was raised approximately one inch which resulted in increased flow. It appears that a slug of sediment had been deposited upstream of the gate. The upstream slug flowed through the gate and within a few minutes noticeable improvements in the irrigation ditch turbidity were noted. The flow gates were closed and stream conditions were allowed to stabilize. Some removal of sediments were noted. The gate was then lifted two inches to allow greater flow. The gate was then closed and once again the stream was allowed to stabilize. Continued improvement was noted regarding sediments in the stream channel. I would estimate that 20 percent of the channel saw noticeable improvement during this short test. Continued flushing should result in successful remediation of removable sediments. Increases in turbidity will be noted during the flushing.

Field measurements of Ph were generally over 7.0 standard units. Conductivity at the downstream sampling location was 350 micro s/cm prior to water release and dropped to approximately 250 micro s/cm when increased flow reached the monitoring point. Dissolved oxygen was indicated to be greater than 7.0 mg/l during the test.

Surface water samples were collected by a representative of the State of Colorado prior to flushing and during flushing.

Greg Powell

USEPA-Environmental Response Team

(513)569-7533 office

(513)607-1572 cell

Facts do not cease to exist because they are ignored.